CLAIMS

1. Pressure-measuring apparatus, comprising:

a battery;

a pressure transducer, which is adapted to be placed in a patient, the pressure transducer having a characteristic mechanical response bandwidth f, and a corresponding mechanical response period p equal to 1/f; and

a control unit, which is adapted to actuate the battery to drive current through the pressure transducer for a current-driving time period less than 0.5 p, and to sense an electrical characteristic of the pressure transducer during the current-driving time period.

2. Apparatus according to claim 1, wherein the pressure transducer is adapted to be implanted in the patient.

3. Apparatus according to claim 1, wherein the pressure transducer is adapted to be incorporated in a catheter.

4. Apparatus according to claim 1, wherein the pressure transducer is adapted to measure an abdominal pressure of the patient.

5. Apparatus according to claim 1, wherein the pressure transducer is adapted to measure a pressure of a urinary bladder of the patient.

6. Apparatus according to claim 1, wherein the pressure transducer is adapted to measure a cardiac pressure of the patient.

7. Apparatus according to claim 1, wherein the pressure transducer is adapted to measure a blood pressure of the patient.

8. Apparatus according to claim 1, wherein the pressure transducer comprises a piezoresistive pressure transducer.

9. Apparatus according to claim 1, wherein the pressure transducer comprises a Wheatstone bridge circuit.

10. Apparatus according to claim 1, wherein the control unit is adapted to set the current-driving time period to be less than 1000 microseconds.

11. Apparatus according to claim 1, wherein the control unit is adapted to designate an initial portion of the current-driving time period as a pressure-transducer stabilization period, during which the control unit withholds from sensing the characteristic.

12. Apparatus according to claim 1, wherein the control unit is adapted to include, in sensing the electrical characteristic, sensing a current passing through the pressure transducer.

13. Apparatus according to claim 1, wherein the control unit is adapted to include, in sensing the electrical characteristic, sensing a voltage drop across two points of the pressure transducer.

14. Apparatus according to claim 1, wherein the control unit is adapted to sense the electrical characteristic substantially only during the current-driving time period.

15. Apparatus according to claim 1, wherein the control unit is adapted to actuate the battery to expend less than 5 microjoules in driving the current through the pressure transducer.

16. Apparatus according to claim 1, wherein the control unit is adapted to actuate the battery to drive the current directly into the pressure transducer,

substantially without charging a capacitor located at a placement site of the pressure transducer.

17. Apparatus according to claim 1, wherein the control unit is adapted to actuate the battery to drive the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer having capacitance greater than 0.1 nF.

18. Apparatus according to claim 1,

wherein the control unit is adapted to actuate the battery to drive current into the pressure transducer during a plurality of current-driving time periods, each less than 0.5 p, and to sense respective electrical characteristics of the pressure transducer during each of the current-driving time periods, and

wherein the battery is adapted to drive the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer during each of the current-driving time periods.

19. Apparatus according to claim 1,

wherein the control unit is adapted to actuate the battery to drive current through the pressure transducer during a plurality of current-driving time periods, each less than 0.5 p, and

wherein a duty cycle of the control unit defined by a length of one of the current-driving time periods divided by a time between the initiation of two successive current-driving time periods is less than 0.3%.

20. Apparatus according to claim 19, wherein the duty cycle of the control unit is less than 0.03%.

21. Apparatus according to claim 1, wherein the control unit is adapted to designate an initial portion of the current-driving time period as a pressure-transducer stabilization period, and to sense the electrical characteristic of the pressure transducer at least in part during the stabilization period.

22. Apparatus according to claim 21, wherein the control unit is adapted to designate the stabilization period to be less than 1 microsecond.

23. Apparatus according to claim 21, wherein the control unit is adapted to sense the electrical characteristic of the pressure transducer exclusively during the stabilization period.

24. Apparatus according to claim 21, wherein the control unit is adapted to process the sensed electrical characteristic responsive to a portion of the stabilization period in which it was sensed.

25. Apparatus according to claim 24, wherein the control unit is adapted to apply a correcting factor to the sensed electrical characteristic responsive to the portion of the stabilization period in which it was sensed.

26. Apparatus according to claim 1, and comprising a signal processor, adapted to be placed in the patient at a common placement site with the pressure transducer and to process the sensed electrical characteristic.

27. Apparatus according to claim 26, wherein the signal processor comprises an amplifier, adapted to amplify the sensed electrical characteristic.

28. Apparatus according to claim 26, wherein the signal processor comprises a microprocessor.

29. Apparatus according to claim 28, and comprising:

a first set of wires, adapted to couple the control unit to the microprocessor; and

a second set of wires, adapted to couple the microprocessor to the pressure transducer,

wherein the number of wires in the second set of wires is greater than the number of wires in the first set of wires.

30. Apparatus according to claim 1, wherein the control unit is adapted to set the current-driving time period to be less than 0.1 p.

31. Apparatus according to claim 30, wherein the control unit is adapted to set the current-driving time period to be less than 0.02 p.

32. Apparatus according to claim 31, wherein the control unit is adapted to set the current-driving time period to be less than 0.004 p.

33. Apparatus according to claim 1, wherein the control unit is adapted to: (a) actuate the battery to drive current through the pressure transducer during a plurality of current-driving time periods, each less than 0.5 p, (b) sense respective electrical characteristics of the pressure transducer during each of the current-driving time periods, and (c) space the current-driving time periods by at least ten milliseconds.

34. Apparatus according to claim 33, wherein the control unit is adapted to space the current-driving time periods by at least one second.

35. Apparatus according to claim 34, wherein the control unit is adapted to space the current-driving time periods by at least one minute.

36. Apparatus according to claim 35, wherein the control unit is adapted to space the current-driving time periods by at least one hour.

37. Pressure-measuring apparatus, comprising:

a pressure transducer, which is adapted to be placed at a pressure-sensing site in a patient, the pressure transducer having a characteristic mechanical response bandwidth f, and a corresponding mechanical response period p equal to 1/f; and

a control unit, adapted to be placed at a control-unit site at least 3 cm from the pressure-sensing site, to drive current through the pressure transducer for a current-driving time period less than 0.5 p, and to sense an electrical characteristic of the pressure transducer during the current-driving time period.

38. Apparatus according to claim 37, wherein the control unit is adapted to be placed at a control-unit site which is at least 5 cm from the pressure-sensing site.

39. Apparatus according to claim 37, wherein the pressure transducer is adapted to be implanted in the patient.

40. Apparatus according to claim 37, wherein the pressure transducer is adapted to be incorporated in a catheter.

41. Apparatus according to claim 37, wherein the pressure transducer is adapted to measure an abdominal pressure of the patient.

42. Apparatus according to claim 37, wherein the pressure transducer is adapted to measure a pressure of a urinary bladder of the patient.

43. Apparatus according to claim 37, wherein the pressure transducer is adapted to measure a cardiac pressure of the patient.

44. Apparatus according to claim 37, wherein the pressure transducer is adapted to measure a blood pressure of the patient.

45. Apparatus according to claim 37, wherein the pressure transducer comprises a piezoresistive pressure transducer.

46. Apparatus according to claim 37, wherein the pressure transducer comprises a Wheatstone bridge circuit.

47. Apparatus according to claim 37, wherein the control unit is adapted to set the current-driving time period to be less than 1000 microseconds.

48. Apparatus according to claim 37, wherein the control unit is adapted to designate an initial portion of the current-driving time period as a pressure-transducer stabilization period, during which the control unit withholds from sensing the characteristic.

49. Apparatus according to claim 37, wherein the control unit is adapted to include, in sensing the electrical characteristic, sensing a current passing through the pressure transducer.

50. Apparatus according to claim 37, wherein the control unit is adapted to include, in sensing the electrical characteristic, sensing a voltage drop across two points of the pressure transducer.

51. Apparatus according to claim 37, wherein the control unit is adapted to sense the electrical characteristic substantially only during the current-driving time period.

52. Apparatus according to claim 37, wherein the control unit is adapted to expend less than 5 microjoules in driving the current through the pressure transducer.

53. Apparatus according to claim 37, wherein the control unit is adapted to drive the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer.

54. Apparatus according to claim 37, wherein the control unit is adapted to drive the current directly into the pressure transducer, substantially without charging a capacitor located with the pressure transducer at the pressure-sensing site having capacitance greater than 0.1 nF.

55. Apparatus according to claim 37,

wherein the control unit is adapted to drive current into the pressure transducer during a plurality of current-driving time periods, each less than 0.5 p, and to sense respective electrical characteristics of the pressure transducer during each of the current-driving time periods, and

wherein the control unit is adapted to drive the current directly into the pressure transducer, substantially without charging a capacitor located with the pressure transducer at the pressure-sensing site during each of the current-driving time periods.

56. Apparatus according to claim 37,

wherein the control unit is adapted to drive current through the pressure transducer during a plurality of current-driving time periods, each less than 0.5 p, and

wherein a duty cycle of the control unit defined by a length of one of the current-driving time periods divided by a time between the initiation of two

successive current-driving time periods is less than 0.3%.

57. Apparatus according to claim 56, wherein the duty cycle of the control unit is less than 0.03%.

58. Apparatus according to claim 37, wherein the control unit is adapted to designate an initial portion of the current-driving time period as a pressure-transducer stabilization period, and to sense the electrical characteristic of the pressure transducer at least in part during the stabilization period.

59. Apparatus according to claim 58, wherein the control unit is adapted to designate the stabilization period to be less than 1 microsecond.

60. Apparatus according to claim 58, wherein the control unit is adapted to sense the electrical characteristic of the pressure transducer exclusively during the stabilization period.

61. Apparatus according to claim 58, wherein the control unit is adapted to process the sensed electrical characteristic responsive to a portion of the stabilization period in which it was sensed.

62. Apparatus according to claim 61, wherein the control unit is adapted to apply a correcting factor to the sensed electrical characteristic responsive to the portion of the stabilization period in which it was sensed.

63. Apparatus according to claim 37, and comprising a signal processor, adapted to be placed in the patient at the pressure-sensing site and to process the sensed electrical characteristic.

64. Apparatus according to claim 63, wherein the signal processor comprises an amplifier, adapted to amplify the sensed electrical characteristic.

65. Apparatus according to claim 63, wherein the signal processor comprises a microprocessor.

66. Apparatus according to claim 65, and comprising:

a first set of wires, adapted to couple the control unit to the microprocessor; and

a second set of wires, adapted to couple the microprocessor to the pressure transducer,

wherein the number of wires in the second set of wires is greater than the number of wires in the first set of wires.

67. Apparatus according to claim 37, wherein the control unit is adapted to set the current-driving time period to be less than 0.1 p.

68. Apparatus according to claim 67, wherein the control unit is adapted to set the current-driving time period to be less than 0.02 p.

69. Apparatus according to claim 68, wherein the control unit is adapted to set the current-driving time period to be less than 0.004 p.

70. Apparatus according to claim 37, wherein the control unit is adapted to: (a) drive current through the pressure transducer during a plurality of current-driving time periods, each less than 0.5 p, (b) sense respective electrical characteristics of the pressure transducer during each of the current-driving time periods, and (c) space the current-driving time periods by at least ten milliseconds.

71. Apparatus according to claim 70, wherein the control unit is adapted to space the current-driving time periods by at least one second.

72. Apparatus according to claim 71, wherein the control unit is adapted to space the current-driving time periods by at least one minute.

73. Apparatus according to claim 72, wherein the control unit is adapted to space the current-driving time periods by at least one hour.

74. Pressure-measuring apparatus, comprising:

a battery;

a pressure transducer, which is adapted to be placed in a patient; and

a control unit, which is adapted to actuate the battery to drive current through the pressure transducer for a current-driving time period less than 1000 microseconds, and to sense an electrical characteristic of the pressure transducer during the current-driving time period.

75. Apparatus according to claim 74, wherein the pressure transducer is adapted to be implanted in the patient.

76. Apparatus according to claim 74, wherein the pressure transducer is adapted to be incorporated in a catheter.

77. Apparatus according to claim 74, wherein the pressure transducer is adapted to measure an abdominal pressure of the patient.

78. Apparatus according to claim 74, wherein the pressure transducer is adapted to measure a pressure of a urinary bladder of the patient.

79. Apparatus according to claim 74, wherein the pressure transducer is adapted to measure a cardiac pressure of the patient.

80. Apparatus according to claim 74, wherein the pressure transducer is adapted to measure a blood pressure of the patient.

81. Apparatus according to claim 74, wherein the pressure transducer comprises a piezoresistive pressure transducer.

82. Apparatus according to claim 74, wherein the control unit is adapted to designate an initial portion of the current-driving time period as a pressure-transducer stabilization period, during which the control unit withholds from sensing the characteristic.

83. Apparatus according to claim 74, wherein the control unit is adapted to include, in sensing the electrical characteristic, sensing a current passing through the pressure transducer.

84. Apparatus according to claim 74, wherein the control unit is adapted to include, in sensing the electrical characteristic, sensing a voltage drop across two points of the pressure transducer.

85. Apparatus according to claim 74, wherein the control unit is adapted to sense the electrical characteristic substantially only during the current-driving time period.

86. Apparatus according to claim 74, wherein the control unit is adapted to actuate the battery to expend less than 5 microjoules in driving the current through the pressure transducer.

87. Apparatus according to claim 74, wherein the control unit is adapted to actuate the battery to drive the

current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer.

88. Apparatus according to claim 74, wherein the control unit is adapted to actuate the battery to drive the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer having capacitance greater than 0.1 nF.

89. Apparatus according to claim 74,

wherein the control unit is adapted to actuate the battery to drive current into the pressure transducer during a plurality of current-driving time periods, each less than 1000 microseconds, and to sense respective electrical characteristics of the pressure transducer during each of the current-driving time periods, and

wherein the battery is adapted to drive the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer during each of the current-driving time periods.

90. Apparatus according to claim 74,

wherein the control unit is adapted to actuate the battery to drive current through the pressure transducer during a plurality of current-driving time periods, each less than 1000 microseconds, and

wherein a duty cycle of the control unit defined by a length of one of the current-driving time periods divided by a time between the initiation of two successive current-driving time periods is less than 0.3%.

91. Apparatus according to claim 90, wherein the duty cycle of the control unit is less than 0.03%.

92. Apparatus according to claim 74, wherein the control unit is adapted to designate an initial portion of the current-driving time period as a pressure-transducer stabilization period, and to sense the electrical characteristic of the pressure transducer at least in part during the stabilization period.

93. Apparatus according to claim 92, wherein the control unit is adapted to designate the stabilization period to be less than 1 microsecond.

94. Apparatus according to claim 92, wherein the control unit is adapted to sense the electrical characteristic of the pressure transducer exclusively during the stabilization period.

95. Apparatus according to claim 92, wherein the control unit is adapted to process the sensed electrical characteristic responsive to a portion of the stabilization period in which it was sensed.

96. Apparatus according to claim 95, wherein the control unit is adapted to apply a correcting factor to the sensed electrical characteristic responsive to the portion of the stabilization period in which it was sensed.

97. Apparatus according to claim 74, and comprising a signal processor, adapted to be placed in the patient at a common placement site with the pressure transducer and to process the sensed electrical characteristic.

98. Apparatus according to claim 97, wherein the signal processor comprises an amplifier, adapted to amplify the sensed electrical characteristic.

99. Apparatus according to claim 97, wherein the signal processor comprises a microprocessor.

100. Apparatus according to claim 99, and comprising:

a first set of wires, adapted to couple the control unit to the microprocessor; and

a second set of wires, adapted to couple the microprocessor to the pressure transducer,

wherein the number of wires in the second set of wires is greater than the number of wires in the first set of wires.

101. Apparatus according to claim 74, wherein the control unit is adapted to: (a) actuate the battery to drive current through the pressure transducer during a plurality of current-driving time periods, each less than 1000 microseconds, (b) sense respective electrical characteristics of the pressure transducer during each of the current-driving time periods, and (c) space the current-driving time periods by at least ten milliseconds.

102. Apparatus according to claim 101, wherein the control unit is adapted to space the current-driving time periods by at least one second.

103. Apparatus according to claim 102, wherein the control unit is adapted to space the current-driving time periods by at least one minute.

104. Apparatus according to claim 103, wherein the control unit is adapted to space the current-driving time periods by at least one hour.

105. Apparatus according to claim 74, wherein the control unit is adapted to set the current-driving time period to be less than 250 microseconds.

106. Apparatus according to claim 105, wherein the control unit is adapted to set the current-driving time period to be less than 50 microseconds.

107. Apparatus according to claim 106, wherein the control unit is adapted to set the current-driving time period to be less than 10 microseconds.

108. Apparatus according to claim 107, wherein the control unit is adapted to set the current-driving time period to be less than 2 microseconds.

109. Pressure-measuring apparatus, comprising:

a pressure transducer, which is adapted to be placed at a pressure-sensing site in a patient; and

a control unit, adapted to be placed at a control-unit site at least 3 cm from the pressure-sensing site, to drive current through the pressure transducer for a current-driving time period less than 1000 microseconds, and to sense an electrical characteristic of the pressure transducer during the current-driving time period.

110. Apparatus according to claim 109, wherein the control unit is adapted to be placed at a control-unit site which is at least 5 cm from the pressure-sensing site.

111. Apparatus according to claim 109, wherein the pressure transducer is adapted to be implanted in the patient.

112. Apparatus according to claim 109, wherein the pressure transducer is adapted to be incorporated in a catheter.

113. Apparatus according to claim 109, wherein the pressure transducer is adapted to measure an abdominal pressure of the patient.

114. Apparatus according to claim 109, wherein the pressure transducer is adapted to measure a pressure of a urinary bladder of the patient.

115. Apparatus according to claim 109, wherein the pressure transducer is adapted to measure a cardiac pressure of the patient.

116. Apparatus according to claim 109, wherein the pressure transducer is adapted to measure a blood pressure of the patient.

117. Apparatus according to claim 109, wherein the pressure transducer comprises a piezoresistive pressure transducer.

118. Apparatus according to claim 109, wherein the control unit is adapted to designate an initial portion of the current-driving time period as a pressure-transducer stabilization period, during which the control unit withholds from sensing the characteristic.

119. Apparatus according to claim 109, wherein the control unit is adapted to include, in sensing the electrical characteristic, sensing a current passing through the pressure transducer.

120. Apparatus according to claim 109, wherein the control unit is adapted to include, in sensing the electrical characteristic, sensing a voltage drop across two points of the pressure transducer.

121. Apparatus according to claim 109, wherein the control unit is adapted to sense the electrical characteristic substantially only during the current-driving time period.

122. Apparatus according to claim 109, wherein the control unit is adapted to expend less than 5 microjoules in driving the current through the pressure transducer.

123. Apparatus according to claim 109, wherein the control unit is adapted to drive the current directly into the pressure transducer, substantially without

charging a capacitor located at a placement site of the pressure transducer.

124. Apparatus according to claim 109, wherein the control unit is adapted to drive the current directly into the pressure transducer, substantially without charging a capacitor located with the pressure transducer at the pressure-sensing site having capacitance greater than 0.1 nF.

125. Apparatus according to claim 109,

wherein the control unit is adapted to drive current into the pressure transducer during a plurality of current-driving time periods, each less than 1000 microseconds, and to sense respective electrical characteristics of the pressure transducer during each of the current-driving time periods, and

wherein the control unit is adapted to drive the current directly into the pressure transducer, substantially without charging a capacitor located with the pressure transducer at the pressure-sensing site during each of the current-driving time periods.

126. Apparatus according to claim 109,

wherein the control unit is adapted to drive current through the pressure transducer during a plurality of current-driving time periods, each less than 1000 microseconds, and

wherein a duty cycle of the control unit defined by a length of one of the current-driving time periods divided by a time between the initiation of two successive current-driving time periods is less than 0.3%.

127. Apparatus according to claim 126, wherein the duty cycle of the control unit is less than 0.03%.

128. Apparatus according to claim 109, wherein the control unit is adapted to designate an initial portion of the current-driving time period as a pressure-transducer stabilization period, and to sense the electrical characteristic of the pressure transducer at least in part during the stabilization period.

129. Apparatus according to claim 128, wherein the control unit is adapted to designate the stabilization period to be less than 1 microsecond.

130. Apparatus according to claim 128, wherein the control unit is adapted to sense the electrical characteristic of the pressure transducer exclusively during the stabilization period.

131. Apparatus according to claim 128, wherein the control unit is adapted to process the sensed electrical characteristic responsive to a portion of the stabilization period in which it was sensed.

132. Apparatus according to claim 131, wherein the control unit is adapted to apply a correcting factor to the sensed electrical characteristic responsive to the portion of the stabilization period in which it was sensed.

133. Apparatus according to claim 109, and comprising a signal processor, adapted to be placed in the patient at the pressure-sensing site and to process the sensed electrical characteristic.

134. Apparatus according to claim 133, wherein the signal processor comprises an amplifier, adapted to amplify the sensed electrical characteristic.

135. Apparatus according to claim 133, wherein the signal processor comprises a microprocessor.

136. Apparatus according to claim 135, and comprising:

a first set of wires, adapted to couple the control unit to the microprocessor; and

a second set of wires, adapted to couple the microprocessor to the pressure transducer,

wherein the number of wires in the second set of wires is greater than the number of wires in the first set of wires.

137. Apparatus according to claim 109, wherein the control unit is adapted to: (a) drive current through the pressure transducer during a plurality of current-driving time periods, each less than 1000 microseconds, (b) sense respective electrical characteristics of the pressure transducer during each of the current-driving time periods, and (c) space the current-driving time periods by at least ten milliseconds.

138. Apparatus according to claim 137, wherein the control unit is adapted to space the current-driving time periods by at least one second.

139. Apparatus according to claim 138, wherein the control unit is adapted to space the current-driving time periods by at least one minute.

140. Apparatus according to claim 139, wherein the control unit is adapted to space the current-driving time periods by at least one hour.

141. Apparatus according to claim 109, wherein the control unit is adapted to set the current-driving time period to be less than 250 microseconds.

142. Apparatus according to claim 141, wherein the control unit is adapted to set the current-driving time period to be less than 50 microseconds.

143. Apparatus according to claim 142, wherein the control unit is adapted to set the current-driving time period to be less than 10 microseconds.

144. A method for measuring pressure via a pressure transducer, placed in a patient, the pressure transducer having a characteristic mechanical response bandwidth f, and a corresponding mechanical response period p equal to 1/f, the pressure transducer being coupled to a battery, the method comprising:

actuating the battery to drive current through the pressure transducer for a current-driving time period less than 0.5 p; and

sensing an electrical characteristic of the pressure transducer during the current-driving time period.

145. A method according to claim 144, wherein the method is practiced via a pressure transducer implanted in the patient.

146. A method according to claim 144, wherein the method is practiced via a pressure transducer incorporated in a catheter.

147. A method according to claim 144, wherein the method comprises measuring an abdominal pressure of the patient.

148. A method according to claim 144, wherein the method comprises measuring a pressure of a urinary bladder of the patient.

149. A method according to claim 144, wherein the method comprises measuring a cardiac pressure of the patient.

150. A method according to claim 144, wherein the method comprises measuring a blood pressure of the patient.

151. A method according to claim 144, wherein the method comprises measuring pressure via a piezoresistive pressure transducer.

152. A method according to claim 144, wherein actuating the battery comprises setting the current-driving time period to be less than 1000 microseconds.

153. A method according to claim 144, wherein actuating the battery comprises:

designating an initial portion of the current-driving time period as a pressure-transducer stabilization period; and

withholding from sensing the characteristic during the stabilization period.

154. A method according to claim 144, wherein sensing the electrical characteristic comprises sensing a current passing through the pressure transducer.

155. A method according to claim 144, wherein sensing the electrical characteristic comprises sensing a voltage drop across two points of the pressure transducer.

156. A method according to claim 144, wherein sensing the electrical characteristic comprises sensing the electrical characteristic substantially only during the current-driving time period.

157. A method according to claim 144, wherein actuating the battery comprises actuating the battery to expend less than 5 microjoules in driving the current through the pressure transducer.

158. A method according to claim 144, wherein actuating the battery comprises actuating the battery to drive the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer.

159. A method according to claim 144, wherein actuating the battery comprises actuating the battery to drive the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer having capacitance greater than 0.1 nF.

160. A method according to claim 144,

wherein actuating the battery comprises actuating the battery to drive current into the pressure transducer during a plurality of current-driving time periods, each less than 0.5 p,

wherein actuating the battery comprises actuating the battery to drive the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer during each of the current-driving time periods, and

wherein sensing the electrical characteristic comprises sensing respective electrical characteristics of the pressure transducer during each of the current-driving time periods.

161. A method according to claim 144, wherein actuating the battery comprises:

actuating the battery to drive current through the pressure transducer during a plurality of current-driving time periods, each less than 0.5 p; and

setting a duty cycle, defined by a length of one of the current-driving time periods divided by a time between the initiation of two successive current-driving time periods, to be less than 0.3%.

162. A method according to claim 161, wherein setting the duty cycle comprises setting the duty cycle to be less than 0.03%.

163. A method according to claim 144, wherein an initial portion of the current-driving time period is designated as a pressure-transducer stabilization period, and wherein sensing the electrical characteristic of the pressure transducer comprises sensing the electrical characteristic at least in part during the stabilization period.

164. A method according to claim 163, wherein the stabilization period is designated to be less than 1 microsecond.

165. A method according to claim 163, wherein sensing the electrical characteristic of the pressure transducer occurs exclusively during the stabilization period.

166. A method according to claim 163, and comprising processing the sensed electrical characteristic responsive to a portion of the stabilization period in which it was sensed.

167. A method according to claim 166, wherein processing comprises applying a correcting factor to the sensed electrical characteristic responsive to the portion of the stabilization period in which it was sensed.

168. A method according to claim 144, and comprising processing the sensed electrical characteristic at a placement site of the pressure transducer.

169. A method according to claim 168, wherein processing the sensed electrical characteristic comprises amplifying the sensed electrical characteristic.

170. A method according to claim 144, wherein actuating the battery comprises setting the current-driving time period to be less than 0.1 p.

171. A method according to claim 170, wherein actuating the battery comprises setting the current-driving time period to be less than 0.02 p.

172. A method according to claim 171, wherein actuating the battery comprises setting the current-driving time period to be less than 0.004 p.

173. A method according to claim 144,

wherein actuating the battery comprises actuating the battery to drive current through the pressure transducer during a plurality of current-driving time periods, each less than 0.5 p, and spacing the current-driving time periods by at least ten milliseconds, and

wherein sensing the electrical characteristic comprises sensing respective electrical characteristics of the pressure transducer during each of the current-driving time periods.

174. A method according to claim 173, wherein spacing the current-driving time periods comprises spacing the current-driving time periods by at least one second.

175. A method according to claim 174, wherein spacing the current-driving time periods comprises spacing the current-driving time periods by at least one minute.

176. A method according to claim 175, wherein spacing the current-driving time periods comprises spacing the current-driving time periods by at least one hour.

177. A method for measuring pressure via a pressure transducer, placed in a patient at a pressure-sensing site, the pressure transducer having a characteristic mechanical response bandwidth f, and a corresponding mechanical response period p equal to 1/f, the method comprising:

from a control-unit site at least 3 cm from the pressure-sensing site, driving current through the pressure transducer for a current-driving time period less than 0.5 p; and

sensing an electrical characteristic of the pressure transducer during the current-driving time period.

178. A method according to claim 177, wherein driving the current comprises driving the current from a control-unit site which is at least 5 cm from the pressure-sensing site.

179. A method according to claim 177, wherein the method is practiced via a pressure transducer implanted in the patient.

180. A method according to claim 177, wherein the method is practiced via a pressure transducer incorporated in a catheter.

181. A method according to claim 177, wherein the method comprises measuring an abdominal pressure of the patient.

182. A method according to claim 177, wherein the method comprises measuring a pressure of a urinary bladder of the patient.

183. A method according to claim 177, wherein the method comprises measuring a cardiac pressure of the patient.

184. A method according to claim 177, wherein the method comprises measuring a blood pressure of the patient.

185. A method according to claim 177, wherein the method comprises measuring pressure via a piezoresistive pressure transducer.

186. A method according to claim 177, wherein driving the current comprises setting the current-driving time period to be less than 1000 microseconds.

187. A method according to claim 177, wherein driving the current comprises:

designating an initial portion of the current-driving time period as a pressure-transducer stabilization period; and

withholding from sensing the characteristic during the stabilization period.

188. A method according to claim 177, wherein sensing the electrical characteristic comprises sensing a current passing through the pressure transducer.

189. A method according to claim 177, wherein sensing the electrical characteristic comprises sensing a voltage drop across two points of the pressure transducer.

190. A method according to claim 177, wherein sensing the electrical characteristic comprises sensing the electrical characteristic substantially only during the current-driving time period.

191. A method according to claim 177, wherein driving the current comprises expending less than 5 microjoules in driving the current through the pressure transducer.

192. A method according to claim 177, wherein driving the current comprises driving the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer.

193. A method according to claim 177, wherein driving the current comprises driving the current directly into the pressure transducer, substantially without charging a capacitor located with the pressure transducer at the pressure-sensing site having capacitance greater than 0.1 nF.

194. A method according to claim 177,

wherein driving the current comprises driving the current into the pressure transducer during a plurality of current-driving time periods, each less than 0.5 p,

wherein driving the current comprises driving the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer during each of the current-driving time periods, and

wherein sensing the electrical characteristic comprises sensing respective electrical characteristics of the pressure transducer during each of the current-driving time periods.

195. A method according to claim 177, wherein driving the current comprises:

driving the current through the pressure transducer during a plurality of current-driving time periods, each less than 0.5 p; and

setting a duty cycle, defined by a length of one of the current-driving time periods divided by a time between the initiation of two successive current-driving time periods, to be less than 0.3%.

196. A method according to claim 195, wherein setting the duty cycle comprises setting the duty cycle to be less than 0.03%.

197. A method according to claim 177, wherein an initial portion of the current-driving time period is designated as a pressure-transducer stabilization period, and wherein sensing the electrical characteristic of the pressure transducer comprises sensing the electrical characteristic at least in part during the stabilization period.

198. A method according to claim 197, wherein the stabilization period is designated to be less than 1 microsecond.

199. A method according to claim 197, wherein sensing the electrical characteristic of the pressure transducer occurs exclusively during the stabilization period.

200. A method according to claim 197, and comprising processing the sensed electrical characteristic responsive to a portion of the stabilization period in which it was sensed.

201. A method according to claim 200, wherein processing comprises applying a correcting factor to the sensed electrical characteristic responsive to the portion of the stabilization period in which it was sensed.

202. A method according to claim 177, and comprising processing the sensed electrical characteristic at the pressure-sensing site.

203. A method according to claim 202, wherein processing the sensed electrical characteristic comprises amplifying the sensed electrical characteristic.

204. A method according to claim 177, wherein driving the current comprises setting the current-driving time period to be less than 0.1 p.

205. A method according to claim 204, wherein driving the current comprises setting the current-driving time period to be less than 0.02 p.

206. A method according to claim 205, wherein driving the current comprises setting the current-driving time period to be less than 0.004 p.

207. A method according to claim 177,

wherein driving the current comprises driving the current through the pressure transducer during a plurality of current-driving time periods, each less than 0.5 p, and spacing the current-driving time periods by at least ten milliseconds, and

wherein sensing the electrical characteristic comprises sensing respective electrical characteristics of the pressure transducer during each of the current-driving time periods.

208. A method according to claim 207, wherein spacing the current-driving time periods comprises spacing the current-driving time periods by at least one second.

209. A method according to claim 208, wherein spacing the current-driving time periods comprises spacing the current-driving time periods by at least one minute.

210. A method according to claim 209, wherein spacing the current-driving time periods comprises spacing the current-driving time periods by at least one hour.

211. A method for measuring pressure via a pressure transducer, placed in a patient, the pressure transducer being coupled to a battery, the method comprising:

actuating the battery to drive current through the pressure transducer for a current-driving time period less than 1000 microseconds; and

sensing an electrical characteristic of the pressure transducer during the current-driving time period.

212. A method according to claim 211, wherein the method is practiced via a pressure transducer implanted in the patient.

213. A method according to claim 211, wherein the method is practiced via a pressure transducer incorporated in a catheter.

214. A method according to claim 211, wherein the method comprises measuring an abdominal pressure of the patient.

215. A method according to claim 211, wherein the method comprises measuring a pressure of a urinary bladder of the patient.

216. A method according to claim 211, wherein the method comprises measuring a cardiac pressure of the patient.

217. A method according to claim 211, wherein the method comprises measuring a blood pressure of the patient.

218. A method according to claim 211, wherein the method comprises measuring pressure via a piezoresistive pressure transducer.

219. A method according to claim 211, wherein actuating the battery comprises:

designating an initial portion of the current-driving time period as a pressure-transducer stabilization period; and

withholding from sensing the characteristic during the stabilization period.

220. A method according to claim 211, wherein sensing the electrical characteristic comprises sensing a current passing through the pressure transducer.

221. A method according to claim 211, wherein sensing the electrical characteristic comprises sensing a voltage drop across two points of the pressure transducer.

222. A method according to claim 211, wherein sensing the electrical characteristic comprises sensing the

electrical characteristic substantially only during the current-driving time period.

223. A method according to claim 211, wherein actuating the battery comprises actuating the battery to expend less than 5 microjoules in driving the current through the pressure transducer.

224. A method according to claim 211, wherein actuating the battery comprises actuating the battery to drive the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer.

225. A method according to claim 211, wherein actuating the battery comprises actuating the battery to drive the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer having capacitance greater than 0.1 nF.

226. A method according to claim 211,

wherein actuating the battery comprises actuating the battery to drive current into the pressure transducer during a plurality of current-driving time periods, each less than 1000 microseconds,

wherein actuating the battery comprises actuating the battery to drive the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer during each of the current-driving time periods, and

wherein sensing the electrical characteristic comprises sensing respective electrical characteristics of the pressure transducer during each of the current-driving time periods.

227. A method according to claim 211, wherein actuating the battery comprises:

actuating the battery to drive current through the pressure transducer during a plurality of current-driving time periods, each less than 1000 microseconds; and

setting a duty cycle, defined by a length of one of the current-driving time periods divided by a time between the initiation of two successive current-driving time periods, to be less than 0.3%.

228. A method according to claim 227, wherein setting the duty cycle comprises setting the duty cycle to be less than 0.03%.

229. A method according to claim 211, wherein an initial portion of the current-driving time period is designated as a pressure-transducer stabilization period, and wherein sensing the electrical characteristic of the pressure transducer comprises sensing the electrical characteristic at least in part during the stabilization period.

230. A method according to claim 229, wherein the stabilization period is designated to be less than 1 microsecond.

231. A method according to claim 229, wherein sensing the electrical characteristic of the pressure transducer occurs exclusively during the stabilization period.

232. A method according to claim 229, and comprising processing the sensed electrical characteristic responsive to a portion of the stabilization period in which it was sensed.

233. A method according to claim 232, wherein processing comprises applying a correcting factor to the sensed

electrical characteristic responsive to the portion of the stabilization period in which it was sensed.

234. A method according to claim 211, and comprising processing the sensed electrical characteristic at a placement site of the pressure transducer.

235. A method according to claim 234, wherein processing the sensed electrical characteristic comprises amplifying the sensed electrical characteristic.

236. A method according to claim 211,

wherein actuating the battery comprises actuating the battery to drive current through the pressure transducer during a plurality of current-driving time periods, each less than 1000 microseconds, and spacing the current-driving time periods by at least ten milliseconds, and

wherein sensing the electrical characteristic comprises sensing respective electrical characteristics of the pressure transducer during each of the current-driving time periods.

237. A method according to claim 236, wherein spacing the current-driving time periods comprises spacing the current-driving time periods by at least one second.

238. A method according to claim 237, wherein spacing the current-driving time periods comprises spacing the current-driving time periods by at least one minute.

239. A method according to claim 238, wherein spacing the current-driving time periods comprises spacing the current-driving time periods by at least one hour.

240. A method according to claim 211, wherein actuating the battery comprises setting the current-driving time period to be less than 250 microseconds.

241. A method according to claim 240, wherein actuating the battery comprises setting the current-driving time period to be less than 50 microseconds.

242. A method according to claim 241, wherein actuating the battery comprises setting the current-driving time period to be less than 10 microseconds.

243. A method according to claim 242, wherein actuating the battery comprises setting the current-driving time period to be less than 2 microseconds.

244. A method for measuring pressure via a pressure transducer, placed in a patient at a pressure-sensing site, the method comprising:

from a control-unit site at least 3 cm from the pressure-sensing site, driving current through the pressure transducer for a current-driving time period less than 1000 microseconds; and

sensing an electrical characteristic of the pressure transducer during the current-driving time period.

245. A method according to claim 244, wherein driving the current comprises driving the current from a control-unit site which is at least 5 cm from the pressure-sensing site.

246. A method according to claim 244, wherein the method is practiced via a pressure transducer implanted in the patient.

247. A method according to claim 244, wherein the method is practiced via a pressure transducer incorporated in a catheter.

248. A method according to claim 244, wherein the method comprises measuring an abdominal pressure of the patient.

249. A method according to claim 244, wherein the method comprises measuring a pressure of a urinary bladder of the patient.

250. A method according to claim 244, wherein the method comprises measuring a cardiac pressure of the patient.

251. A method according to claim 244, wherein the method comprises measuring a blood pressure of the patient.

252. A method according to claim 244, wherein the method comprises measuring pressure via a piezoresistive pressure transducer.

253. A method according to claim 244, wherein driving the current comprises:

designating an initial portion of the current-driving time period as a pressure-transducer stabilization period; and

withholding from sensing the characteristic during the stabilization period.

254. A method according to claim 244, wherein sensing the electrical characteristic comprises sensing a current passing through the pressure transducer.

255. A method according to claim 244, wherein sensing the electrical characteristic comprises sensing a voltage drop across two points of the pressure transducer.

256. A method according to claim 244, wherein sensing the electrical characteristic comprises sensing the electrical characteristic substantially only during the current-driving time period.

257. A method according to claim 244, wherein driving the current comprises expending less than 5 microjoules in driving the current through the pressure transducer.

258. A method according to claim 244, wherein driving the current comprises driving the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer.

259. A method according to claim 244, wherein driving the current comprises driving the current directly into the pressure transducer, substantially without charging a capacitor located with the pressure transducer at the pressure-sensing site having capacitance greater than 0.1 nF.

260. A method according to claim 244,

wherein driving the current comprises driving the current into the pressure transducer during a plurality of current-driving time periods, each less than 1000 microseconds,

wherein driving the current comprises driving the current directly into the pressure transducer, substantially without charging a capacitor located at a placement site of the pressure transducer during each of the current-driving time periods, and

wherein sensing the electrical characteristic comprises sensing respective electrical characteristics of the pressure transducer during each of the current-driving time periods.

261. A method according to claim 244, wherein driving the current comprises:

driving the current through the pressure transducer during a plurality of current-driving time periods, each less than 1000 microseconds; and

setting a duty cycle, defined by a length of one of the current-driving time periods divided by a time

between the initiation of two successive current-driving time periods, to be less than 0.3%.

262. A method according to claim 261, wherein setting the duty cycle comprises setting the duty cycle to be less than 0.03%.

263. A method according to claim 244, wherein an initial portion of the current-driving time period is designated as a pressure-transducer stabilization period, and wherein sensing the electrical characteristic of the pressure transducer comprises sensing the electrical characteristic at least in part during the stabilization period.

264. A method according to claim 263, wherein the stabilization period is designated to be less than 1 microsecond.

265. A method according to claim 263, wherein sensing the electrical characteristic of the pressure transducer occurs exclusively during the stabilization period.

266. A method according to claim 263, and comprising processing the sensed electrical characteristic responsive to a portion of the stabilization period in which it was sensed.

267. A method according to claim 266, wherein processing comprises applying a correcting factor to the sensed electrical characteristic responsive to the portion of the stabilization period in which it was sensed.

268. A method according to claim 244, and comprising processing the sensed electrical characteristic at the pressure-sensing site.

269. A method according to claim 268, wherein processing the sensed electrical characteristic comprises amplifying the sensed electrical characteristic.

270. A method according to claim 244,

wherein driving the current comprises driving the current through the pressure transducer during a plurality of current-driving time periods, each less than 1000 microseconds, and spacing the current-driving time periods by at least ten milliseconds, and

wherein sensing the electrical characteristic comprises sensing respective electrical characteristics of the pressure transducer during each of the current-driving time periods.

271. A method according to claim 270, wherein spacing the current-driving time periods comprises spacing the current-driving time periods by at least one second.

272. A method according to claim 271, wherein spacing the current-driving time periods comprises spacing the current-driving time periods by at least one minute.

273. A method according to claim 272, wherein spacing the current-driving time periods comprises spacing the current-driving time periods by at least one hour.

274. A method according to claim 244, wherein driving the current comprises setting the current-driving time period to be less than 250 microseconds.

275. A method according to claim 274, wherein driving the current comprises setting the current-driving time period to be less than 50 microseconds.

276. A method according to claim 275, wherein driving the current comprises setting the current-driving time period to be less than 10 microseconds.